

THE NEUROSCIENCE OF CHANGE



**Presented by
Walter McFarland**

Walter McFarland is 2013 Board Chair of the American Society for Training and Development (ASTD), the world's largest professional association dedicated to the training and development

profession. He was a senior vice president at Booz Allen Hamilton where he led the firm's Global Human Capital and Learning businesses; and a senior principal at Hay Management Consultants, where his business focus was human capital, learning, and change.

His career has been as a consultant focused on large-scale improvements in organizational performance by focusing on the human factor. His core belief is that people are the source of each organization's competitive advantage. As a consultant, McFarland has led engagements focused on transforming the Internal Revenue Service, creating the HR function of the Department of Homeland Security, and better integrating HR capabilities of the U.S. Intelligence Community. His work has earned the Hammer Award, the IRS Commissioner's Award, the Director of National Intelligence Innovation Award, and recognition from the Smithsonian Institution, among others.

This keynote presentation was especially important for Professional Division members working in the Organization Development field and who focus on improving individuals' abilities and creating groups and organizations that unleash competitive advantage.

McFarland began by pointing out the great opportunities for improving organization development activities. He described how neuroscience research increases our knowledge of the brain and may be a source of new insight into the theory and practice of organizational change. In this conversation, Walter shared insights on specific attributes of the brain that inform behavior during organizational change, how current change approaches actually trigger resistance in the brain, and how key neuroscience-informed actions can improve performance of change activities.

In the past twenty-five years, neuroscientists have

gained better understanding of human nature and behavior through use of new technologies: imaging tools such as functional magnetic resonance imaging (fMRI) and positron emission tomography (PET), and brain wave analysis techniques such as quantitative electroencephalography (QEEG). This new information has led to an increasing integration of psychology and neuroscience. The implications of these brain science breakthroughs are significant for PD members who are Change Practitioners. It is vital to the success of Change



Practitioners to understand two of these hard-wired systems involved in fight/flight reactions—*error detection* and *fear response*.

We now know that human behavior in the workplace doesn't work as we had thought. We have learned that evolutionary processes affect how the brain relates to Change. Five things about the brain can help Change Practitioners increase their effectiveness:

1. **The brain is focused on *surviving*** – in physical, social, and organizational contexts.
2. **The brain has developed specialized survival systems**, involving motivation, memory, error detection, and fear response. All of these systems, which have evolved over eons, operate in today's organizational environment. *Wanting* something is driven by the dopaminergic system; *avoiding* or flight response is driven by serotonin. Most importantly for those of us who help in Organization Development, ***the motivation to avoid is stronger than that to approach.***

3. The brain “hardwires” patterns of thinking. The brain developed hardwired neural systems for surviving and navigating the external environment. Working memory (understand, decide, recall, memorize, inhibit), is located in the prefrontal cortex; and habit memory (patterns of behavior), is located in the basal ganglia. “Error signals” can trigger an **amygdala hijack**, which overwhelms working memory and creates a profound fear response and resistance to Change. In the organizational context, habits are good—they create efficiencies during normal operations; or bad—they can be very difficult and painful to change.

4. The brain can be “rewired.” Neuroplasticity is becoming more and more important in this work. Helping people “think better” is an emerging leadership competency.

5. “Bad is stronger than good.”

2. Shape the *external* environment. Meet external change head-on by using robust environmental scanning and futures techniques to better anticipate and shape market changes. Reduce organizational anxiety and fatigue from endlessly *following* market changes. Motivate staff to think about Change proactively and constructively. Avoid being a fast follower of changes driven by others.

3. Shape the *internal* environment. Make the organization a place for great thinking. Integrate Change into day-to-day business by vesting responsibility for Change in the local line people. Focus senior management on game-changing opportunities and create a brain-friendly environment.

4. Create a change-enabled workforce. Identify, brand, and assess Change-related competencies in the organization. Organization leaders help others think better about Change.

Summary—Five Things About the Brain	
Five Things About the Brain	Implications for Change Practitioners
It focuses on surviving	Change can threaten survival
It evolved specialized systems	Change affects multiple brain systems; <i>Change is pain.</i>
It “hardwires”	Change demands changing habits
It can be “rewired”	Neuroplasticity can be learned
“Bad is stronger than good”	Change efforts should focus on the positive

After summarizing these features of neuroscience, McFarland suggested Organization Development applications in the current volatile world.

Imagine a new kind of organization optimized for Change—an organization that uses Change as fuel to become continuously better and more competitive. In such an organization, Change is no longer something it does, but something it is.

Here is a neuroscience-based Change framework for organizations:

1. Integrate Change into strategy. He suggests that leaders link Change to the organization’s destiny by declaring the importance of Change in the context of strategy, giving Change powerful context and purpose. This linkage reduces organizational anxiety about Change and sets the stage for creating a “Change-focused culture.” Linking Change to strategy connects the dots for people.

5. Continuously generate and celebrate short- and long-term wins. The key is fighting *bad* through recurring experiences with *good*. Neuroscience research affirms the importance of celebration in best thinking. Short-term celebration should occur immediately after success. Long-term celebration should be tied to major milestones. Celebration helps the brain rewire Change as “wanting.”

In summary, McFarland showed that the field of organizational change has been growing and learning across its sixty-six-year history. Understanding the brain adds real insight into more effective Change leadership, better engaging people in Change, and building organizations better at Changing.

